dCS Verdi Encore

Upsampling CD/SACD Transport

User Manual

Software Release 1.0x

August 2005

© *dCS* Ltd. 2001 - 2005 **Price UK £17.50 / Euro 25.00**

All rights reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form, or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of ***dCS***[1]. Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

Information contained in this manual is subject to change without notice, and whilst it is checked for accuracy, no liabilities can be accepted for errors.

[1] ***dCS*** is Data Conversion Systems Ltd. Company registered in England No. 2072115.

PRODUCT OVERVIEW

The ***dCS Verdi Encore*** Upsampling SACD Transport is a further development of the critically acclaimed ***dCS Verdi*** and ***Verdi La Scala***.

Verdi Encore plays SACD or Hybrid discs and outputs the DSD data onto an IEEE 1394 bus, ready for conversion to wide-band, high quality audio by a ***dCS Elgar Plus*** or a 1394-equipped ***dCS Delius***[2].

Verdi Encore also plays standard CDs and the CD layer of Hybrid discs, upsampling the data to DSD internally, without the need for a separate upsampler. This is ideal for audiophiles who do not use other digital audio sources, as the equipment set-up is much simpler.

DSD (Direct Stream Digital) is single bit data, sampled at 2.822MS/s. This data format increases the available audio band-width to well over 100kHz, well in excess of the 20kHz available from a standard CD system. The extra band-width sharpens the transient response and improves the phase response, resulting in a more natural sound and more precise stereo imaging.

CD data at 16 bits / 44.1kS/s is always available from the AES interface (XLR connector), three SPDIF interfaces (RCA, BNC and Toslink optical) and an SDIF-2 interface. When playing an SACD, the data is down-sampled to provide these outputs.

Verdi Encore features a Word Clock Input, allowing the transport to be synchronised to a Master Clock or a ***dCS*** DAC running in master mode. This arrangement reduces system jitter – a major source of sound degradation in digital audio systems.

In common with all ***dCS*** products, ***Verdi Encore*** is based on our flexible digital audio platform which makes extensive use of software configurable chips – FPGA's and DSP's. This allows the internal software to be updated from time to time, either from a ***dCS*** CD or from a PC, adding extra features and facilities to your system with a minimum of fuss.

In addition to the above, the ***Verdi Encore*** has provision for two digital inputs on XLR and RCA connectors which will enable the user to connect other digital sources to their system. These inputs are not active in the current version of software, they will be activated in a future software release.

Laser Radiation Hazard

dCS Verdi Encore is a Class 1 Laser Product, it complies with U.S. FDA 21CFR subchapter J. The U.S. FDA Accession number is 0211117. In normal use, there is no risk of exposure to laser radiation.

IMPORTANT! *The metal top cover must only be removed by authorised service personnel. The cover protects the user from indirect exposure to visible and invisible laser radiation, as well as risk of electric shock.*

[2] To comply with the licence arrangements for SACD, this data is encrypted in the ***Verdi Encore*** and is decrypted in the receiving unit.

GIUSEPPE VERDI (1813 –1901)

The ***dCS Verdi*** family is named after Giuseppe Verdi, the 19th century Italian composer. He was born in the village of Roncole in the province of Parma on October 10th, 1813. From an early age he showed a strong interest in music and commenced his formal musical studies at the age of 7, tutored by the organist in his village church.

When he was 10, Verdi moved to the nearby town of Busseto, where he attended the music school run by Ferdinando Provesi. In Busseto he made the acquaintance of Antonio Barezzi, a local merchant and passionate music lover. Barezzi provided Verdi with financial assistance during the remainder of his musical studies and many years later in 1836, Verdi married Barezzi's daughter, Margherita.

In 1832 he applied to study at the prestigious Milan Conservatory, but was turned down. Instead, he studied in Milan under the private tuition of Vincenzo Lavingna, a composer and former harpsichordist at the La Scala theatre. During his stay in Milan, Verdi spent a great deal of time attending the theatre and this almost certainly accounts for his work being heavily biased towards opera.

On Provesi's death in 1833, Verdi returned to Busseto with the aim of taking over his position as head of the town's music school. However, this was delayed until 1836 by political squabbling between the clergy and his supporters in the local Philharmonia.

In 1838, Verdi moved to Milan where the following year he presented his first opera, **Oberto, conte di San Bonifacio** at the La Scala theatre, where it was received to moderate acclaim.

1840 must have been the worst year of his life. First his two children and then his wife died in quick succession. His misery was further compounded when his second opera, **Un Giorno di Regno**, closed after only one performance. At this point Verdi seriously considered giving up composing altogether. At the insistence of Bartolomeo Merelli, the impresario of the La Scala theatre, Verdi read a libretto written by Solera. The biblical themes deeply moved him and motivated him to write his second opera, **Nabucco**, which was hailed as a triumph when it was performed for the first time at La Scala in 1842. **Nabucco** firmly established Verdi as one of the leading Italian composers of the day.

Verdi then commenced a period of prodigious creativity. Between 1843 and 1858 he wrote a total of 20 operas. Of these, 3 are especially of note and are still regularly performed: **Rigoletto** - written in 1851, **Il trovatore** and **La traviata** - both written in 1853.

In 1859 he married his second wife, the soprano Giuseppina Strepponi, whom he had known since 1842 when she sang the female lead in **Nabucco** at La Scala.

Verdi's works often contained strong political themes. This interest in politics was carried over to his private life and, in 1861, he was elected as a deputy to the first Italian parliament.

His success had made him a wealthy as well as famous man. He used his considerable fortune to progressively increase the size of his farm holdings in Parma. By 1900, these had become the largest revenue producer in the province.

He continued to compose, albeit at a slower pace. In 1873 he wrote his **Requiem Mass**, which was dedicated to the memory of the poet Alessandro Manzoni, though its origins go back to a work he first composed as a homage to Rossini.

The most notable operas of his latter years are: **Aida** – written in 1871, **Otello** - written in 1887 and **Falstaff** - written in 1893. The last two were based on plays by Shakespeare and are widely regarded as masterpieces. His last major work, the **Four Sacred Pieces** (**Ave Maria**, **Stabat Mater**, **Te Deum** and **Laudi alla Vergine**), was written in 1898, a year after the death of his second wife Giuseppina.

Giuseppe Verdi died on January 27th 1901. In accordance with his wishes, he was given a simple funeral, without singing or music. The following month, he was entombed in a state ceremony with his second wife, at the rest home for musicians that he had helped to set up many years before, to care for singers and instrumentalists who had fallen on hard times in their old age. The procession was accompanied by members of Verdi's family, members of the Italian Royal family, members of Parliament, foreign diplomats and leading composers including Puccini, Mascagni and Leoncavello. Arturo Toscanini lead tens of thousands of mourners with the choruses of La Scala, in the singing of **Va, pensiero** from **Nabucco**.

Recommended recordings

Requiem
Philadelphia Orchestra conducted by Eugene Ormandy.
Sony SACD SS00707

Rigoletto
English National Opera
CHAN 3030

Otello
English National Opera conducted by Mark Elder
CHAN 3068(2)

Otello
Chicago Symphony Orchestra conducted by Sir George Solti
London 422 670-2

Il Trovatore
Berliner Philharmoniker conducted by Herbert von Karajan
EMI CMS7 69311/2

La Traviata
e Coro del Maggio Musicale, Florence conducted by Zubin Meta
Philips 438 238-2

Macbeth
Choir and Orchestra of the German Opera Berlin conducted by Giuseppe Sinopoli
Philips 412 133-2

Four Sacred Pieces and Requiem
Monteverdi Choir and Orchestre Revolutionnaire et Romantique conducted by John Eliot Gardener
Philips 442 142-2

CONTENTS

Product Overview 3
Laser Radiation Hazard 3

Giuseppe Verdi (1813 –1901) 4
Recommended recordings 5

Contents 6
About this Manual 9
What does the coloured text mean? 9
About Sample Rates 9

Step-by-Step Guide 10
Preliminaries 10
Step 1 – Connecting the System 11
Connecting the 1394 Interface 11
Connecting the DAC Outputs 11
Connecting a PCM Output 12
Step 2 – Playing a Disc 12
Step 3 – Track Selection 13
Programming a Track Sequence 13
Playing all Tracks in a Random Order 13
Step 4 – Setting a Repeat Sequence 13
Other Settings 13

Typical Applications 14
Using a DAC in Master Mode 14

The Software – The Menu 16
Using the Menu 16
Opening the Menu 16
Types of Menu Page 16
Closing the Menu 16
Menu Sequence 17
Brightness - Display Brightness 17
Layer (CD, SACD) 17
Issue – Software Issue State 17
Serial – Unit Serial Number 18
Contact Details - Contact information 18
CDUpdate – Software Update by CD 18

The Hardware – Controls and Connectors 20
Front Panel 20
Key to Front Panel 20
Power Button 20
Play / Pause Button 21
Stop / Eject Button 21
Status Indicator 21
Digital Input Indicator 21
Remote Control Sensor 21
Main Display 21
Mode Indicator 21
Menu Button (Select) 22
Previous Track Button (Step Back) 22
Next Track Button (Step) 22
CD Tray 22
Rotary Control 22
Rear Panel 23
Key to Rear Panel 23
AES/EBU Digital Input 23
SPDIF Digital Input 23
AES/EBU Digital Output 23
SPDIF Digital Outputs 24
SPDIF Optical Output 24
SDIF Interface 24
Word Clock Digital Input 24

1394 Interface 24
Power Link 25
SUC 25
Power switch 25
IEC Power Inlet 25
Mains Fuse 25
Additional Information 25
Remote Control 26
Standby button 26
SACD / CD button 26
Transport Controls 27
Display Button 27
Vol/Bal Button 27
0 – 9 Buttons 27
Menu Button 27
Up and Down Buttons 27
Mute Button 27

Verdi Encore Technical Information 28
Mechanism 28
Digital Interface Specifications 28
Sample Rates 29
Clocking 29
Synchronising to Word Clock In 29
Power requirements 29
Size and Weight 30
Operating Conditions 30

General Technical Information 32
IEEE 1394 Overview 32
Synchronising IEEE 1394 interfaces 32
Automatic Input Selection 32
dCS IR Remote Control Codes 34
Upsampler 34
DACs 35
Transports 36

Using your _dCS Verdi Encore_ for the First Time 38
What's in the Box? 38
Safety Notice 38
Mains Voltage Setting 39
Positioning the Unit 39

Options 40
Mains Supply Voltage 40
Having Your Options Changed 40

Maintenance and Support 42
Service & Maintenance 42
Obtaining Service 42
Mains Fuse 42
Replacing a Blown Fuse 42
Removing the Transit Screws 43
Fitting the Top Glass Plate 43
Fitting or Replacing the Batteries in the Remote Control 45
Opening the battery compartment and removing batteries 45
Fitting new batteries and closing the case 45
dCS Limited Warranty 46
What This Warranty Covers 46
What This Warranty Does Not Cover 46
How To Obtain Service 46
Updating your *Verdi Encore* 47
Software Updates 47
Hardware Updates 47
Safety and Electrical Safety 48
Cleaning the Case 48

Troubleshooting 50
Troubleshooting Guide 50
The unit fails to power up 50
The DAC/DDC suddenly mutes, *Verdi Encore* repeats its' power-up sequence 50
The DAC/DDC fails to lock to *Verdi Encore* or displays "No Input" 50
The DAC/DDC locks but no signal is received 50
A disc is trapped in the unit 50
The Remote Control fails to control the unit 51
The Display turns on briefly when a control is operated, then turns off 51
CD-R does not play correctly 51
Troubleshooting the IEEE 1394 Interface 52
Upsampler or Transport displays "Inactive" 52
The Unit keeps displaying "No Comms" 52
The Unit keeps displaying "Search.." 52
The DAC displays "Verdi Word Clock Missing" 52
The DAC displays "Missing Word Clock between Clk Out & Verdi Clk In" 52
The DAC displays "Please check source slaved to DAC Word Clock Out" 52
The DAC displays "Wrong Word Clock @ Verdi Clk In" 53
The DAC remains muted 53
The DAC takes a long time to unmute 53

If You Need More Help 54
Other Information 54

Indexes and Software Version Numbers.....55
Software History 55
Definitions and Abbreviations 55
Key to Cable Identification 56
List of Tables 56
List of Figures 56
Keywords and Phrases 57

About this Manual

If you have not used a ***Verdi Encore*** before, please read the section "Using your ***dCS Verdi Encore*** for the first time" on page **38**.

This manual has been arranged with the most commonly used sections placed first:

- table of contents (page **6**)
- step-by-step (page **10**) and applications guides (page **14**)
- detailed software and hardware information (page **16**)
- technical information (page **28**)
- information for first time users (page **38**)
- options, maintenance and troubleshooting (page **40**)
- index section (page **55**)

What does the coloured text mean?

If you are reading a colour print or a soft copy of this manual, you will notice that some types of text are in colour:

- **Brown text in bold** is a reference to another section or page. Sometimes, if you are reading a soft copy of the manual, page numbers are hyperlinks – click on them and you will go there.
- **Blue text** is used for controls and connectors, described in the hardware section.
- **White text in bold on black** is used for alternative control functions, such as menu operation.
- Pink text is a menu page or setting.
- **Green text in bold** shows what appears on the display.
- **Purple text in bold** is used for indicators.

IMPORTANT! *Important information is presented like this - ignoring this may cause you to damage the unit, or invalidate the warranty.*

The manual is designed to be helpful. If there are points you feel we could cover better, or that we have missed out - please tell us.

About Sample Rates

All references to sample rates in this manual use the unit kS/s (kilo Samples per second) rather than the technically incorrect kHz.

STEP-BY-STEP GUIDE

This section guides you through setting up the unit for basic operation. You may find this useful if you have not used the ***Verdi Encore*** for a while.

Preliminaries

The **Control Summary** sheet details the menu structure and outlines the use of the front panel controls. For more information, see the Menu section on page **16**.

For digital interfaces, use with cables designed for digital audio:

- for AES/EBU interfaces use 110Ω screened, twisted pair cables fitted with one male XLR connector and one female XLR connector.
- for SDIF, Wordclock or SPDIF BNC interfaces, use 75Ω coax cables fitted with BNC plugs.
- for SPDIF RCA interfaces, use 75Ω coax cables fitted with RCA Phono plugs.
- for TOSLINK optical interfaces, use Toslink fibre-optic cables.
- for IEEE 1394 interfaces, use the IEEE 1394 cable provided with the unit.

do this: Connect the power cable supplied to the Power inlet on the ***Verdi Encore*** rear panel, plug the other end into a convenient power outlet. Set the power switch beside the power inlet to the on position (I).

IMPORTANT! *Please do not use an excessively thick power cable as this may damage the power inlet connector. Such damage is not covered by the warranty.*

do this: Press the **Power** button and wait about 5 seconds while ***Verdi Encore*** configures itself.

The display will show in sequence: **Encore, Welcome, Reading** and **No Disc**.

Step 1 – Connecting the System

There are only two connections needed between the ***Verdi Encore*** and the DAC. The ***Verdi Encore*** is compatible with the ***dCS Elgar Plus*** DAC or the ***dCS Delius*** DAC equipped with the 1394 option.

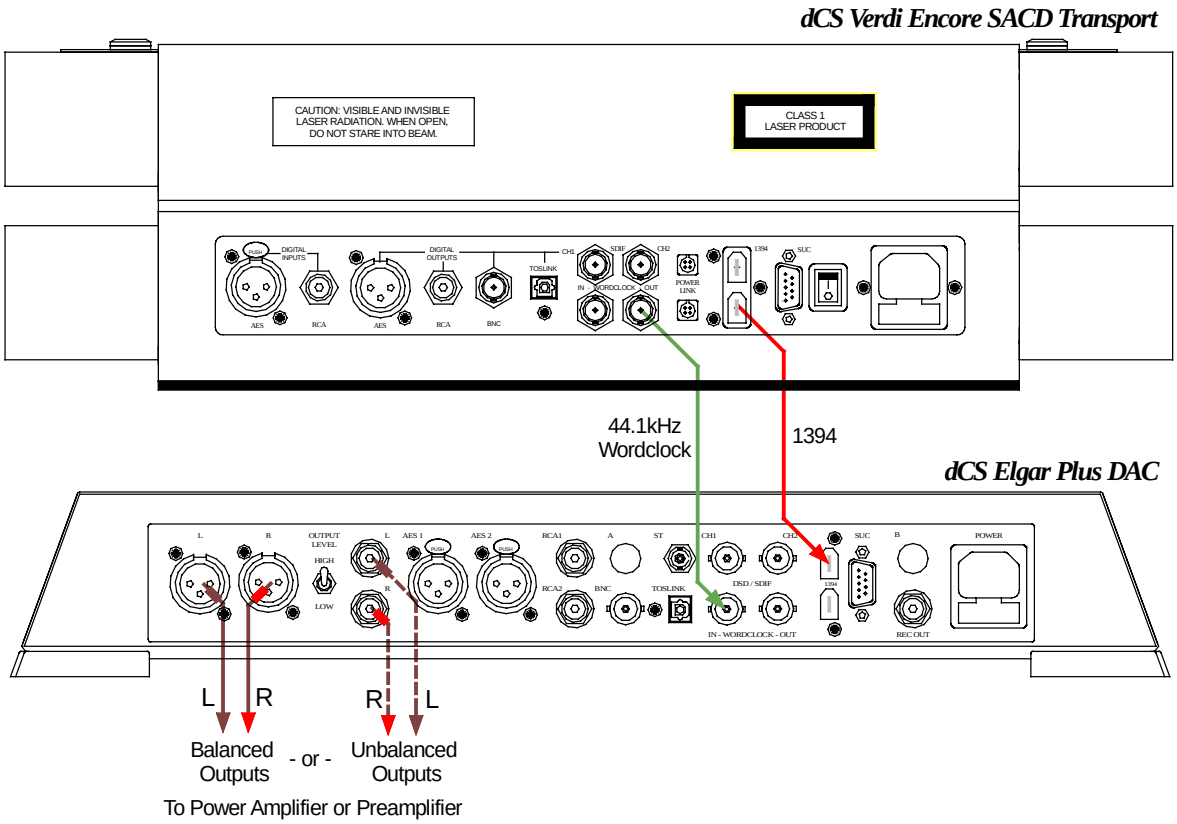


Figure 1 – Connecting ***Verdi Encore*** to ***Elgar Plus***

Connecting the 1394 Interface

While playing an SACD, Hybid disc or CD, DSD data is available from either of the 1394 connectors. This can be decoded by a 1394–equipped ***dCS Elgar Plus*** or ***Delius*** DAC.

do this: Set the DAC to **1394** mode first.
do this: Connect ONE of the **1394** connectors on ***Verdi Encore's*** rear panel to the DAC using the IEEE 1394 cable supplied.
do this: Also connect ***Verdi Encore***'s **Word Clock Out** to Word Clock In on the DAC.

IMPORTANT! *Do not connect both of* ***Verdi Encore****'s 1394 connectors to the DAC.*

Connecting the DAC Outputs

do this: Connect the DAC analogue outputs to matching inputs on your preamplifier / power amplifier. Connect the power amplifier outputs to your loudspeakers.
do this: Set the preamplifier or DAC Volume control to a low level.
do this: Ensure all system components are switched on.

This set-up is shown in **Figure 1**.

Connecting a PCM Output

For the best sound quality, use the 1394 interface. Standard CD data is available from all of the PCM outputs, if you want to use them.

do this: Connect any of the **AES, RCA, BNC** or **Toslink** outputs on the ***Verdi Encore*** rear panel to the matching inputs on the DAC using suitable cables.

do this: If you want to use **SDIF-2** instead, connect the **CH1** and **CH2** outputs on the ***Verdi Encore*** rear panel to the matching inputs on the DAC using suitable cables. Also connect the **Word Clock Out** output on the ***Verdi Encore*** rear panel to the Word Clock In connector on the DAC.

Step 2 – Playing a Disc

do this: Press the **Stop/Eject** button.

The display will show **Opening** then **Open**.

do this: Load a disc into the tray and either push the tray in gently or press the **Eject** button again.

The display will show **Closing**, then **Reading**. The disc will be identified as a CD, SACD. Either the **CD** or the **SACD** indicator will light. In this release, the unit will play the SACD layer of a hybrid disc by default.

Depending on the type of disc inserted, the ***Verdi Encore*** behaves as follows:

- **CD** - When the ***Verdi Encore*** detects a CD, the unit displays **CDDA PCM**, **CDDA Stopped** and then **CDDA {number of tracks}**. Press **Play** to start playing the disc.
- **SACD** - When the ***Verdi Encore*** detects an SACD, the unit displays **SACD DSD**, **SACD Stopped** and then **SACD {number of tracks}**. Press **Play** to start playing the disc.
- **HYBRID** - When the ***Verdi Encore*** detects a Hybrid disc, it will select the SACD layer. It will display **SACD DSD**, **SACD Stopped**, **SACD 01** and starts playing the disc.

do this: Select the **1394** input on the DAC.
do this: Allow the DAC to lock and un-mute.
do this: Press the **Play** button. Turn up the Volume to a comfortable level.

You should have audio.

For all discs, the disc type and elapsed time will be displayed.

do this: Press the **Play/Pause** button to pause playing, press again to resume playing.
do this: Press the **Next Track** or **Previous Track** buttons to skip to another track.

IMPORTANT! *Please be patient, do not overload the unit with commands. If two many* **Previous Track** *commands are sent, the unit may freeze at track 1. To correct this, press the* **Next Track** *button once to go to track 2.*

do this: Press the **Stop/Eject** button to stop the disc. Press it again to open the tray.

Step 3 – Track Selection

To change to a particular track:

do this: Press the track number on the **0–9** buttons.
do this: For example, for track number 15, press **1**, then press **5** within the next three seconds.

Programming a Track Sequence

This feature is not active in this release. It will be activated in a future software release.

Playing all Tracks in a Random Order

This feature is not active in this release. It will be activated in a future software release.

Step 4 – Setting a Repeat Sequence

This feature is not active in this release. It will be activated in a future software release.

Other Settings

More features are available through the Menu. See the Menu section starting on page **16** for more information.

TYPICAL APPLICATIONS

Using a DAC in Master Mode

You can reduce the jitter in your system by using a ***dCS*** DAC in Master mode to clock the Transport.

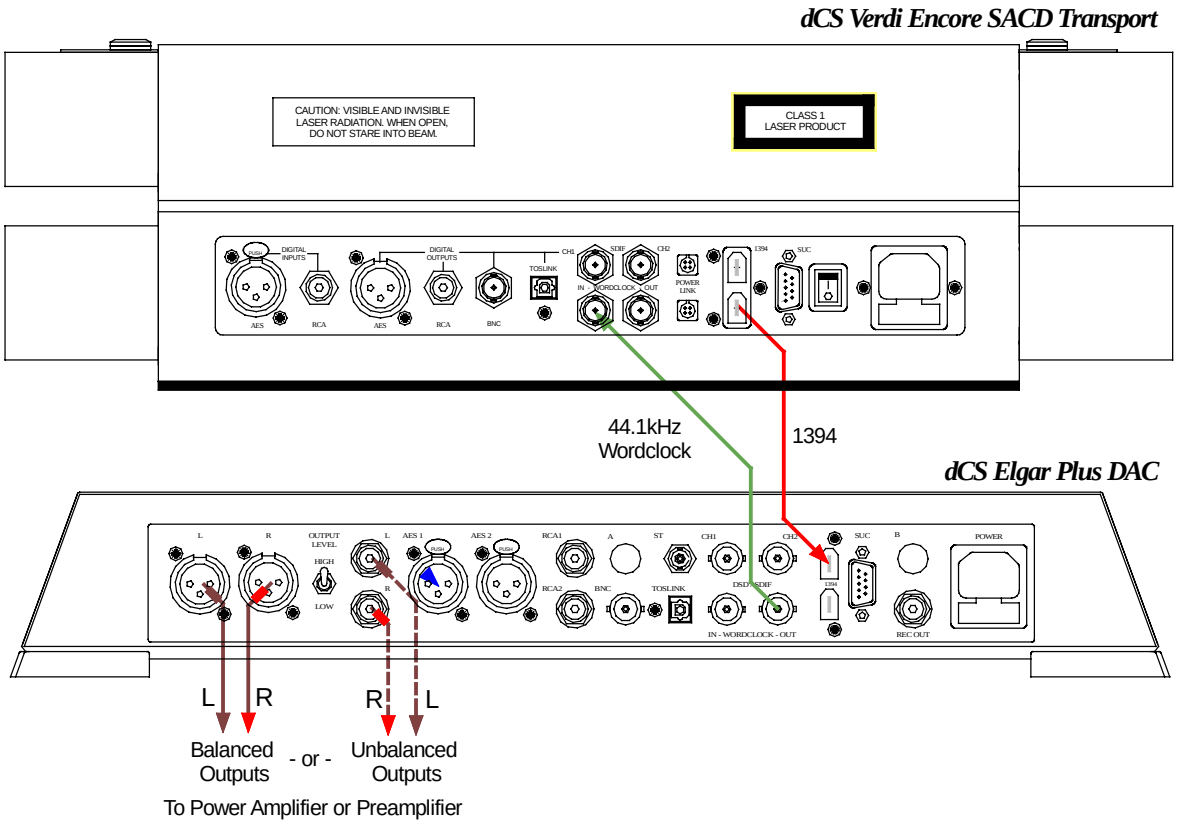


Figure 2 – Using a DAC in Master mode

do this: Connect up as shown in **Figure 2**.

IMPORTANT! *Note that the Word Clock connections are different to those in* **Figure 1**.

Elgar Plus setup for software version 4.2x or later:

do this: The first time you use this arrangement, open the menu and run the Factory routine.

do this: While playing an SACD, use the **Input** button to select the **1394** input and allow the unit to settle. Open the menu again, choose a Filter if you wish, then set the MS page to MS:Mastr.

do this: When the system has re-locked, use the **Volume** control to set a comfortable listening level.

THE SOFTWARE – THE MENU

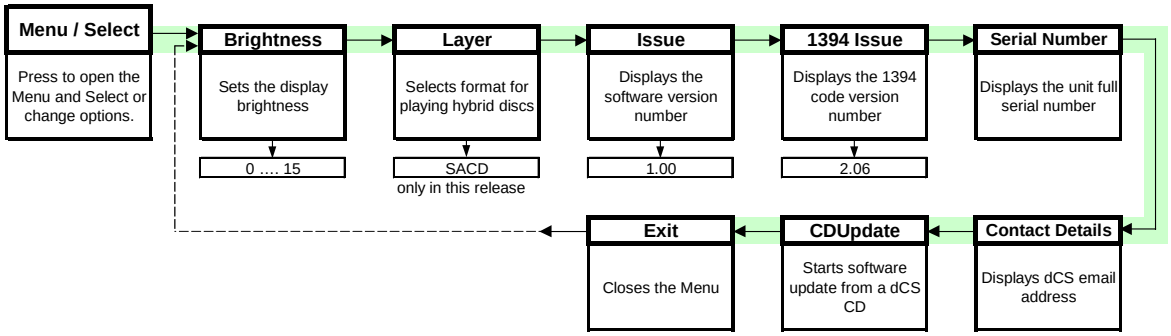


Figure 3 – Menu flow chart

Using the Menu

The Menu gives the user access to a wide range of additional features. It also allows new features and performance enhancements to be added at a later date by software upgrades.

Opening the Menu

The Menu is controlled by three buttons:

- the **Menu** button opens the menu and doubles as the **Select** button.
- the **Step** → button pages forward through the Menu – the **Step** button.
- the ← **Step** button pages backward through the Menu – the **Step Back** button.

Successive presses of the **Step** button page through the Menu. You cannot go directly to any particular page, but must enter at the top of the Menu and then page through until you reach the page you want.

Types of Menu Page

There are two types of page in the Menu - Parameter Pages and Information Pages.

Parameter pages allow the user to check and also change the current settings of the operating parameters, for example Brightness: 10. When a parameter page is displayed, press the **Select** button change the page setting.

Information pages display information about the unit, for example Software Issue: 1.00..

Closing the Menu

There are two ways to close the menu and return to normal operation. The easiest way is to wait 5 seconds for the unit to time-out and revert to the standard display. Alternatively, use the **Step** button to page forward until the display shows **Exit** and then press the **Select** button once.

If the unit times out before the operation in hand has been completed, simply re-enter the menu, page forward (or backward) and continue where you left off.

Menu Sequence

Use the flow chart (**Figure 3**) or the **Control Summary** sheet to guide you through the Menu more quickly.

The following explanation deals with the Menu pages in the sequence they occur in the Menu[3]. The use of each page is shown on an individual basis, with the last operation being closing the Menu. After you have become more familiar with the Menu, you will find it more convenient to perform all the Menu operations in one go before finally closing the Menu.

Brightness - Display Brightness

This adjusts the brightness of the main display, with settings between 15 (brightest) and 0 (off, unless something is touched).

do this: Open the Menu and step through until the display shows **Brightness: x**, where x is a number between 15 and 0.

do this: Press the **Select** button repeatedly and the display cycles through Brightness 0, Brightness 1, ..., Brightness 14, Brightness 15 and back to Brightness 0.

After time-out, a setting of Brightness 0 blanks the display unless the unit is not locked. Operating any control or locking to a source while in this mode turns the display back on momentarily.

Layer (CD, SACD)

Hybrid discs have two layers, an SACD layer and a CD layer. If you are playing a hybrid disc, this menu setting allows you to choose which layer is played. Please note the mechanism takes many seconds to reconfigure to a different layer. The default setting for a hybrid disc is the SACD layer.

IMPORTANT! *The Layer feature will be activated in a later software release. The SACD layer of hybrid discs will be played.*

Issue – Software Issue State

This displays the issue number of the software fitted to your unit. You will need to check this if you are considering a software upgrade or if your unit malfunctions.

do this: Open the Menu and step through until the display shows **Issue**: **x.xx**

1394 Issue – 1394 Interface Software Issue State

This displays the 1394 code version loaded in the 1394 interface.

do this: Open the Menu and step through until the display shows **1394 Issue**: **x.xx**

[3] A minor software update may change the order of the menu items or add an option. If this happens, the Control Summary sheet may be updated before the manual.

Serial – Unit Serial Number

This displays the full serial number, including the hardware configuration code. We will need this information to assemble upgraded software to suit your unit.

do this: Have a pen and paper ready to note down the number. Open the Menu and step through until the display shows **Serial Number**.

do this: Press the **Select** button once and the serial number will scroll across the display.

Contact Details - Contact information

This displays ***dCS'*** email address and web-site URL.

do this: Open the Menu and step through until the display shows **Contact**.

do this: Press the **Select** button once and the contact information will scroll across the display.

CDUpdate – Software Update by CD

Future releases of software can be loaded via a CD using this part of the menu. Please follow the instructions supplied with the software update CD.

IMPORTANT! *Remember to disconnect all 1394 cables before updating.*

THE HARDWARE – CONTROLS AND CONNECTORS

Front Panel

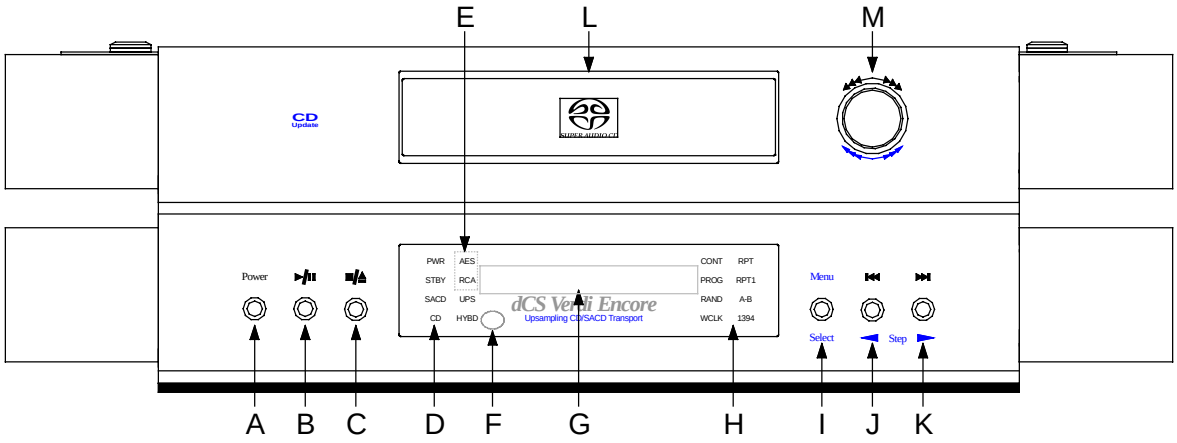


Figure 4 – ***dCS Encore*** Front Panel

Key to Front Panel

A	**Power** / Standby button
B	**Play / Pause** button
C	**Stop / Eject** button
D	**Status** indicator
E	**Digital Input** indicator
F	Remote Control sensor
G	**Main Display**
H	**Mode** indicator
I	**Menu** or **Select** button
J	**Previous Track** / Menu **Step Back** button
K	**Next Track** / Menu **Step** button
L	SACD/CD tray
M	Rotary control

Power Button

This button doubles as a power on / off switch and a standby mode switch.

do this: To switch on, press the **Power** button briefly. If power is available, the **PWR** indicator will light and ***Verdi Encore*** will run through the power up routine.

Note that the **Power** button will not click when turning power on – this is normal.

do this: When you have finished listening, press the **Power** button briefly to set the unit to standby mode.

The outputs will mute, all displays will turn off except the **PWR** indicator. In this mode, ***Verdi Encore*** uses little power. If power is switched off or fails, Standby mode is cancelled.

do this: To restore normal operation, press the **Power** button briefly again.

Verdi Encore will power up ready for use.

do this: To switch off completely, press the **Power** button and hold it for a few seconds until the **Main Display** shows **Power Off**, then release it.

Play / Pause Button ▶ / ❚❚

do this: With a disc loaded, press this button to start it playing. Press it to pause and press again to resume playing.

Stop / Eject Button ■ / ⏏

do this: With a disc playing, press this button to stop playing. Press again to open or close the CD tray and change the disc.

Status Indicator

This consists of 6 indicators:

- **PWR** is lit when power is connected and the unit is turned on or is in standby mode.
- **STBY** is lit when the unit has been placed in Standby mode.
- **SACD** is lit when the unit detects that a SACD is loaded, or that a hybrid disc is loaded and the unit is set to SACD mode.
- **CD** is lit when the unit detects that an ordinary CD is loaded, or that a hybrid disc is loaded and the unit is set to CD mode.
- **HYBD** is lit when the unit detects that a hybrid SACD / CD is loaded. (Not active on current release of software.)
- **UPS** is lit when a CD layer is being upsampled to DSD.

Digital Input Indicator

The digital inputs are not active in this release. They will be activated by a future software update.

Remote Control Sensor

Point the end of the **Remote Control** unit towards the sensor for best control range.

Main Display

The main display tells you what *Encore* is doing.

After pressing **Eject**, the display will show **Opening**, then **Open**. While the tray is closing the display will show **Closing**. While the table of contents of a disc is being read, the display will show **Reading**.

While playing a disc, pressing the **Display** button on the Remote Control displays the number of the track being played for approximately 5 seconds and then reverts back to elapsed time of the current track.

When accessing the Menu (see page **16**), menu options are displayed here.

Mode Indicator

The upper block of 6 indicators shows which play mode has been selected. These later by a future software update.

When a 44.1kHz Word Clock is connected to **Word Clock In**, *Verdi Encore* automatically slaves to it. The **WCLK** indicator flashes while the unit is locking then remains on while locked. It will ignore Word Clocks at frequencies other than 44.1kHz.

When playing an SACD, the IEEE **1394** interface is active and the **1394** indicator lights up.

Menu Button (**Select**)

Press the **Menu** button to open the Menu (see page **16**) and change or **Select** settings in the menu.

Previous Track Button ⏮ (**Step Back**)

Next Track Button ⏭ (**Step**)

Press the **Previous Track** button briefly to skip to the previous track.

Press the **Next Track** button briefly to skip to the next track.

When the Menu is open, these two buttons are used for paging backwards and forwards through the Menu (see page **16**).

CD Tray

When the tray is open, a gentle push will close it.

If the tray is open when the unit is on and you press the **Power** button, the tray will close automatically before the unit enters standby mode or powers down.

Rotary Control

While the Menu is open, use the **Rotary Control** to page forwards and backwards through the menu.

Rear Panel

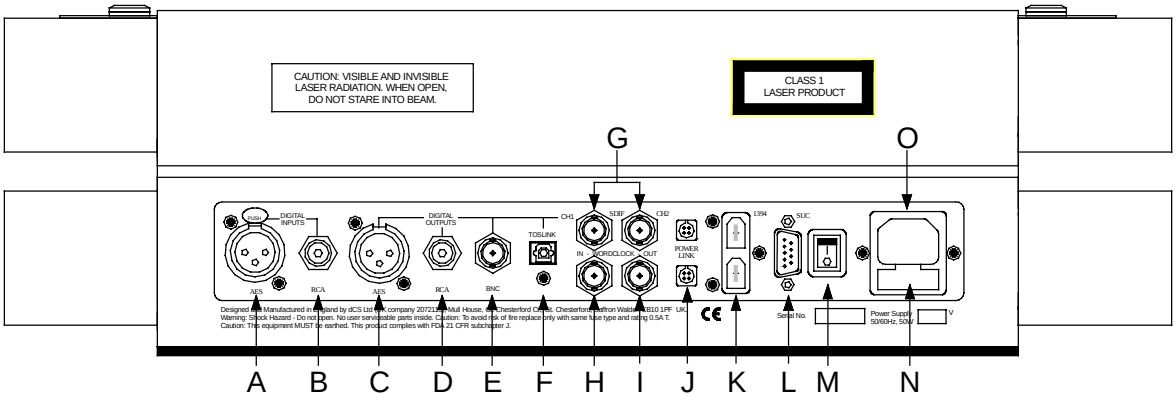


Figure 5 – ***dCS Verdi Encore*** Rear Panel

Key to Rear Panel

A	**AES**/EBU Digital Input on XLR female connector
B	SPDIF Digital Input on **RCA** connector
C	**AES**/EBU digital output on XLR male connector
D & E	SPDIF digital outputs on **RCA** & **BNC** connectors
F	SPDIF optical output on **TOSLINK** connector
G	**SDIF** interface on 2 BNC connectors
H	**Word Clock** digital **In**put
I	**Word Clock** digital **Out**put
J	**Power Link** connectors
K	IEEE **1394** interface on two 6-way connectors
L	**S**oftware **U**pgrade **C**onnector, 9-way ‘D’ type
M	Power switch
N	Mains fuse holder
O	IEC **Power** inlet

AES/EBU Digital Input

This feature is not active this release. It will be activated in a future software release.

SPDIF Digital Input

This feature is not active this release. It will be activated in a future software release.

AES/EBU Digital Output

The **AES 1** output carries AES/EBU digital signals, sampled at 44.1kS/s. The data format is AES3. Data from SACDs is also available, down-sampled to 16 bit / 44.1kS/s.

Use with 110 ohm screened, twisted pair cable designed for digital audio or RF. Unscreened cables must not be used as they may pick up interference from other appliances.

SPDIF Digital Outputs

The SPDIF outputs (**RCA** or **BNC**) carry identical digital signals, sampled at 44.1kS/s. The data format is IEC60958, otherwise known as SPDIF. Data from SACDs is also available, down-sampled to 16 bit / 44.1kS/s. RCA connectors are the type commonly found on consumer equipment.

Use with 75 ohm co-axial cables designed for digital audio or RF use. Some types of audio cable are not suitable and may cause crackling noises or other malfunctions.

IMPORTANT! *If the Copy Prohibit flag in the source data on the disc is set, you will not be able to record the data from the SPDIF outputs.*

SPDIF Optical Output

The optical output carries optically transmitted digital signals, sampled at 44.1kS/s. The data format is IEC60958, otherwise known as SPDIF. Data from SACDs is also available, down-sampled to 16 bit / 44.1kS/s.

Use the **Toslink** output with Toslink fibre optic cables designed for digital audio use. Pull off the plastic cover before use.

SDIF Interface

This consists of two data outputs, **CH1** & **CH2** and the **Word Clock Out**, all on BNC sockets. The interface carries digital signals, sampled at 44.1kS/s. The data format is SDIF-2. Data from SACDs is also available, down-sampled to 16 bit / 44.1kS/s.

Connect up the three BNC sockets with 75Ω co-axial cables designed for digital audio or RF use. A.C. coupled cables are not suitable.

IMPORTANT! *Please ensure the 3 cables are correctly connected to the DAC (or other destination equipment), otherwise the interface may malfunction or the channels may be swapped.*

When playing a disc, **Word Clock Out** carries a 44.1kHz Word Clock.

Word Clock Digital Input

Word Clock In accepts a 44.1kHz Word Clock. It allows ***Verdi Encore*** and the rest of your system to be synchronised to a master clock. This arrangement helps reduce jitter, which can degrade the audio output. When a 44.1kHz Word Clock is connected, ***Verdi Encore*** will automatically slave to it. The **WClk** indicator will flash while locking and stay on while ***Verdi Encore*** is locked.

There is no data on the Word Clock interface. Use with 75 ohm co-axial cables designed for digital audio or RF use. A.C. coupled cables are not suitable.

1394 Interface

All units feature an IEEE **1394** multi-channel interface, available on two 6-way 1394 connectors. You can connect up to eight 1394 sources to the bus, but avoid loops.

In this release, the unit generates DSD data at 2.822MS/s from either **1394** connector. For correct operation, the DAC must be locked to the 44.1kHz signal on ***Verdi Encore***'s **Word Clock Out** connector (or the system must be locked to a master clock running at 44.1kHz). We recommend using the 1.8 metre long, 6-way IEEE 1394 cable assembly and the BNC cable assembly provided. The **1394** indicator lights when the interface is active. See "IEEE 1394 Overview" on page **32** for more information.

IMPORTANT! *Do not connect both **1394** outputs to the same DAC or other destination equipment - the interface system will be stuck in an endless loop and will not work.*

Power Link

These can be linked to similar connectors on other ***dCS*** units using a link cable. All units linked in this way may be turned on or off or set to standby by pressing a single **Power** button or sending one Remote Control command. Link cables are available from ***dCS***.

SUC

The Software Upgrade Connector is intended to be used by ***dCS*** service agents to load new software into ***Verdi Encore***.

IMPORTANT! *Do not connect any other equipment to the SUC connector as this may damage both **Verdi Encore** and the equipment so connected. Do not operate **Verdi Encore** with a PC connected. Failure to observe this warning will void the unit's warranty, and may cause unpleasant effects in your system.*

Power switch

The Power switch completely isolates the unit from the power supply. In normal use, set it to the On position (**I**). Set it to Off (**0**) during electrical storms, or while you are away for a long period.

IEC Power Inlet

Use with a 3 - pin IEC type power cable.

Mains Fuse

Replace only with a 20 x 5mm 500mA T HRC fuse. Please see page **42** for replacement details.

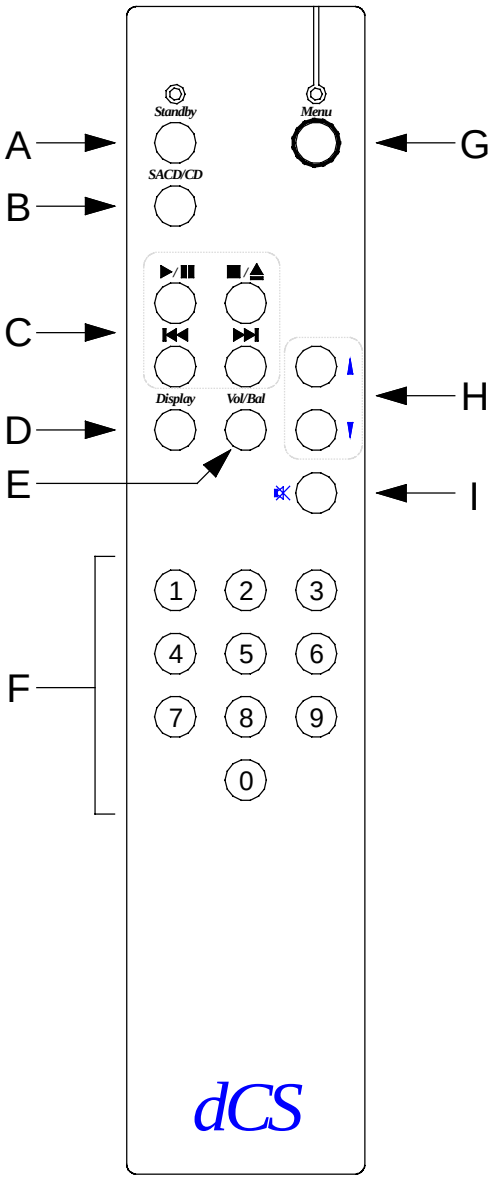
Additional Information

The rear panel displays the following information about the unit:

- The manufacturer's name and address.
- Supply voltage setting, frequency range and rated power.
- The short form of the unit serial number.

We will need the serial number (preferably the full serial number from the menu) to give you support over the phone, or to ship you software updates.

Remote Control



Standby button

Pressing the **Standby** button normally sets the ***Verdi Encore*** to standby mode. Press again to restore normal operation.

SACD / CD button

When playing a hybrid disc, this button selects either the SACD or CD layer.

IMPORTANT! *The SACD/CD feature will be activated in a later software release. The SACD layer of hybrid discs will be played.*

Transport Controls

The **Play / Pause**, **Stop / Eject**, **Previous Track** and **Next Track** buttons control the transport in the same way as the buttons on the front panel.

The **Previous Track** and **Next Track** buttons also double as **Fast Forward** and **Fast Reverse** buttons on the remote control.

When the Menu is open the **Previous Track** and **Next Track** buttons are used to scroll up and down the menu.

Display Button

Pressing this button displays the track number being played for approximately 5 seconds and then reverts back to Track time.

Vol/Bal Button

Pressing the **Vol/Bal** button puts a ***dCS*** DAC in Balance mode – use the **Up/Down** buttons to adjust the Balance. Balance mode times out after 5 seconds if no adjustment is made.

This button does not affect ***Verdi Encore***.

0 – 9 Buttons

The ten numbered buttons are used to select track numbers. We recommend using the numeric keypad for selecting tracks. For example, if track 5 on a disc is being played but you want to go back to track 3, just press 3 on the remote control keypad.

Menu Button

Opens the Menu. Use the **Previous Track** and **Next Track** buttons to page through the menu and press **Menu** again to select a function. Note that the menu may time out if there is no activity for 5 seconds.

Up and Down Buttons

Use the **Up/Down** buttons to alter the Volume setting of a ***dCS*** DAC.

These buttons do not affect ***Verdi Encore***.

Mute Button

Press the **Mute** button to mute or un-mute a ***dCS*** DAC.

This button does not affect ***Verdi Encore***.

VERDI ENCORE TECHNICAL INFORMATION

Mechanism

Dual laser, 2 channel, SACD/CD compatible
Vibration absorbing elastomer suspension
Drawer type loader

Digital Interface Specifications

IEEE 1394	I/O	
Type	200Mbit	
Data format	***dCS*** Encrypted DSD	
Connectors	6-way x 2	

Table 1 – IEEE 1394 Interface Electrical Characteristics

AES/EBU (AES3)		Input	Output	
Type		Balanced, differential		
Impedance		110		Ω
Sensitivity / Level (unloaded)		0.5	7	V pk-pk
Connector		XLR3 female	XLR3 male	
Connections	Pin 1	Ground or shield		
	Pin 2	+Signal		
	Pin 3	-Signal		

Table 2 – AES/EBU Interface Electrical Characteristics

SPDIF (electrical)	Input	Output	
Type	Single ended, ground referred		
Impedance	75		Ω
Sensitivity / Level (unloaded)	0.5	1.0	V pk-pk
Connector	RCA Phono	RCA phono & BNC	

Table 3 – SPDIF Interface Electrical Characteristics

SPDIF (optical)	Toslink Output	
Type	Optical	
Wavelength	660	nm
Connector	Toslink EIAJ CP-340	

Table 4 – Optical Interfaces Electrical Characteristics

SDIF-2 / Word Clock	WClk Input	Outputs	
Type	Single ended, ground referred		
Impedance	100	25	Ω
Level (unloaded)	TTL	TTL	
Connector	BNC	BNC x 3	

Table 5 – SDIF / Word Clock Interface Electrical Characteristics

Sample Rates

2.822MS/s DSD on the IEEE **1394** interface when playing an SACD. If the upsampling feature is enabled, CD data is upsampled to DSD. Use with a 44.1kHz Word Clock.
16 bit / 44.1kS/s on **AES, RCA, BNC, Toslink** and **SDIF**-2 interfaces, downsampled when playing an SACD.
The Word Clock interface generates / accepts a 44.1kHz Word Clock.

Clocking

The sample clock quality significantly determines the output performance of the unit. The highest quality clocks that are available are crystals, so we use these. ***Verdi Encore*** uses on-board voltage controlled crystal oscillators (VCXO's) as clock sources. In master mode, this clocks the outputs and controls the mechanism.

When slaving to **Word Clock In**, the VCXO is synchronised to the clock signal extracted from the input by a phase locked loop (PLL). This PLL is of a special narrow bandwidth type, that provides a significant degree of "clock cleaning". The PLL is also very robust, and will lock to very poor signals if necessary.

Accuracy Typically ± 3 parts per million at time of shipping

Synchronising to Word Clock In

The unit will slave to a 44.1kHz Word Clock on the **Word Clock In** connector.

Pull-in range ± 300 parts per million about nominal frequency
Lock-in time < 6 seconds for most situations

Power requirements

Units may be set for 100, 115/120, 200, 215/220 or 230/240V (+/-10%), 50/60Hz AC operation.

	Typical power consumption	**Maximum power consumption**
Purcell* & *Verona	16W	20W
Delius	21W	25W
Elgar Plus	34W	40W
Verdi Encore	25W	50W

Table 6 – Power consumption for consumer products

Size and Weight

	Length	Depth	Height	Weight
Purcell & ***Verona***	461mm (18.15”)	413mm (16.18”)	69mm (2.70”)	8.5kg (18.7lbs)
Delius	461mm (18.15”)	413mm (16.18”)*****	69mm (2.70”)	8.8kg (19.4lbs)
Elgar Plus	461mm (18.15”)	406mm (16.0”)	75mm (2.94”)	12.0kg (26.4lbs)
Verdi Encore	461mm (18.15”)	415mm (16.34”)******	137mm (5.39”)	17kg (37.4lbs)

Table 7 – Size and weight for consumer products

- ****Delius*** only: the control knob protrudes out of the front by 20mm (0.79”).
- *****Verdi Encore*** only: the control knob protrudes out of the front by 13mm (0.51”).
- Allow extra depth for cable connectors.

Operating Conditions

- Ambient temperature range: 0°C (32°F) to 50°C (122°F), non-condensing.
- Do not install the unit near heat sources such as radiators, air ducts, power amplifiers or direct strong sunlight.
- If in doubt, the easy test is - ***Verdi Encore*** is happy to work anywhere a human is.

GENERAL TECHNICAL INFORMATION

IEEE 1394 Overview

The IEEE 1394 interface is a high speed multi-channel system. It has the capacity to carry over 50 channels of DSD (Direct Stream Digital) or over 30 channels of 24 bit / 192kS/s audio data through a single cable.

From October 2001 onwards, a pair of 6-way electrical IEEE 1394 interfaces running at 200Mbit/s are available on the following ***dCS*** products:

- ***dCS Elgar Plus*** DAC, standard fit with software version 4.10 or later.
- ***dCS Delius*** DAC, optional fit with software version 2.10 or later.
- ***dCS Purcell*** Upsampler, optional fit with software version 2.11 or later.
- ***dCS Verdi*** SACD/CD Transport, standard fit.
- ***dCS Verdi La Scala*** Upsampling SACD/CD Transport, standard fit.
- ***dCS Verdi Encore*** Upsampling SACD/CD Transport, standard fit.

In the current implementation, ***Purcell*** can upsample standard digital formats (such as CD at 44.1kS/s 16 bits) to DSD at 2.822MS/s and output a stereo pair of DSD data onto its 1394 interface. ***Verdi*** can read DSD data from an SACD and output a stereo pair of DSD data onto its 1394 interface. The data is encrypted to conform to the conditions of the DSD licensing arrangements. Either ***Elgar Plus*** or ***Delius*** will accept DSD data from the 1394 interface and convert it to high quality analogue.

The hardware interface is very flexible and software configurable. We will add other features and data formats at a later date, adopting industry standard formats as they stabilise.

Synchronising IEEE 1394 interfaces

The IEEE 1394 system is great for carrying large amounts or digital audio data – but is inherently very jittery. To ensure low-jitter conversion to analogue, each unit linked by the 1394 system must be synchronised to the others by another connection.

- A DAC in slave mode should be sync'ed to ***Verdi*** by connecting ***Verdi***'s **WClk Out** to the DAC's **WClk In**.
- A DAC in master mode should sync ***Verdi*** by connecting the DAC's **WClk Out** to ***Verdi***'s **WClk In**.
- An Upsampler should be slaved to ***Verdi***, usually by the selected PCM input (**AES** or **RCA**).

Automatic Input Selection

From October 2002 onwards, the software on the following products has been enhanced to automatically select the interface carrying data from ***Verdi***:

- ***dCS Elgar Plus*** DAC, standard fit with software version 4.20 or later.
- ***dCS Delius*** DAC, optional fit with software version 2.20 or later.
- ***dCS Verdi*** SACD/CD Transport, standard fit with software version 1.20 or later.
- ***dCS Verdi La Scala*** Upsampling SACD/CD Transport, standard fit, with the Easy Play menu set to Verdi.

The system relies on a 1394 link between ***Verdi*** and the DAC. The DAC will automatically change inputs whenever ***Verdi*** changes layer or starts playing.

If the ***Verdi*** starts playing an SACD, the DAC selects that 1394 channel.

If the ***Verdi*** starts playing a CD and:

- there is a second source on the 1394 bus (such as a ***Purcell***), the DAC will select the other source.
- there are more than two other sources on the 1394 bus (such as a ***Purcell*** or another ***Verdi***), the DAC will select one of the other sources. You may have to manually select the source you want.
- ***Verdi*** is the only source on the 1394 bus, the DAC will scan the PCM inputs and select the first active one it finds. The priority order is: **AES1** (and **Dual AES**) first, **AES2**, **RCA1**, **RCA2**, **TOS**, **ST**, **BNC**. If the active input is not derived from ***Verdi***, you may have to manually select the source you want. If none of the PCM inputs are active, the DAC will remain selected to the original 1394 channel.

This arrangement works best with only two inputs connected to the DAC – ***Verdi***'s 1394 feed for SACD's and either a PCM feed from ***Verdi*** or an upsampled feed from ***Verdi***. The DAC can be in master or slave mode – we recommend master mode.

If you are using a ***Purcell*** in Dual AES mode (rather than DSD mode), you should set the DAC's Dual AES menu page to either Lock or Auto.

The DAC has enough information about the system set-up to report connection and setting errors. These are:

- **Verdi Word Clock Missing**
- **Please Check Source Slaved to Delius / Elgar Plus Word Clock Out**
- **Missing Word Clock between ClkOut and Verdi Clk In**
- **Wrong Fs @ Verdi Clk In**

dCS IR Remote Control Codes

This section gives details of the Remote Control codes generated by ***dCS*** IR Remote Control units, for use with programmable remote controls. All ***dCS*** Remote Control units use the RC5 system and a carrier frequency of 37.9kHz. For more information on the use of ***dCS*** Remote Control units, please refer to the manual for that unit.

IMPORTANT! *Please note that* ***dCS*** *cannot accept responsibility for any difficulties experienced with other manufacturer's remote control units.*

Upsampler

For ***Purcell***, the category code is **29** (decimal).

These Upsampler codes are in use on the ***Elgar Plus / Delius*** Remote v2.0 and Transport Remote v2.0.

Button Code		*Purcell*
Decimal	**Hexadecimal**	**RC button**
1	01	RCA1 / RCA2
3	03	AES1 / AES2
6	06	BNC
7	07	Display
12	0C	Standby
14	0E	Filter
16	10	(up)
17	11	(down)
26	1A	Function
27	1B	Input
32	20	32kS/s out
33	21	44.1kS/s out
34	22	48kS/s out
35	23	88.2kS/s out
36	24	96kS/s out
37	25	176.4kS/s out
38	26	192kS/s out
39	27	DSD/1394 out
41	29	Standby ON
42	2A	Standby OFF
43	2B	Power OFF
44	2C	Filter 1
45	2D	Filter 2
46	2E	Filter 3
47	2F	Filter 4

DACs

For all DACs, the category code is **13** (decimal).

These DAC codes up to decimal 27 are in use on the ***Elgar Plus / Delius*** Remote v2.0, Transport Remote v2.0 and ***Elgar*** Remote v1.0. ***Elgar Plus*** v4.20 or later and ***Delius*** v2.20 or later will respond to codes over decimal 27.

Button or Function Code		***Elgar Plus / Delius***	***Elgar***
Decimal	**Hexadecimal**	**RC function**	**RC button**
1	01	RCA1	Coax1
2	02	-	Opt2
3	03	AES1	AES1
4	04	AES2	AES2
5	05	-	Opt1
6	06	BNC	Coax2
7	07	Display	Display
8	08	Vol/Bal	Vol/Bal
9	09	Phase	Phase
12	0C	Standby	Standby
13	0D	Mute	Mute
14	0E	Filter	Filter
15	0F	RCA2	-
16	10	(up)	(up)
17	11	(down)	(down)
26	1A	Function	-
27	1B	Input	Input
32	20	Dual AES	-
33	21	SDIF	-
34	22	1394 CH 0	-
35	23	1394 CH 1	-
36	24	1394 CH 2	-
37	25	1394 CH 3	-
38	26	1394 CH 4	-
39	27	Mute On	-
40	28	Mute Off	-
41	29	Standby On	-
42	2A	Standby Off	-
43	2B	Power Off	-
44	2C	Filter 1	-
45	2D	Filter 2	-
46	2E	Filter 3	-
47	2F	Filter 4	-
48	30	Filter 5	-
49	31	Filter 6	-
50	32	Master	-
51	33	Slave	-

Transports

For ***Verdi***, ***La Scala*** & ***Encore***, the category code is **20** (decimal).

These Transport codes are in use on the Transport Remote v2.0.

Button Code		*Verdi*
Decimal	**Hexadecimal**	**RC button**
0	00	Keypad 0/10
1	01	Keypad 1
2	02	Keypad 2
3	03	Keypad 3
4	04	Keypad 4
5	05	Keypad 5
6	06	Keypad 6
7	07	Keypad 7
8	08	Keypad 8
9	09	Keypad 9
10	0A	Standby ON
11	0B	Standby OFF
12	0C	Standby (toggle)
15	0F	Display
25	19	Stop Rewind
26	1A	Stop Fast Forward
29	1D	Repeat
32	20	Next Track
33	21	Previous Track
34	22	Next Index
35	23	Previous Index
36	24	Play Mode
41	29	Program
43	2B	Fast Forward
50	32	Rewind
53	35	Play
54	36	Stop/Eject
55	37	Power OFF [4]
58	3A	Clear
59	3B	A/B
60	3C	SACD/CD
61	3D	Select CD layer
62	3E	Select SACD layer

[4] The Power Off code was 63 decimal in ***Verdi*** v1.20 – 1.25. Some Pronto units were found to send code 20-63 for no apparent reason, so we changed the code to 55 decimal.

USING YOUR *dCS VERDI ENCORE* FOR THE FIRST TIME

Thank you for purchasing this ***dCS Verdi Encore***. Before attempting to use your ***Verdi Encore***, please read at least the rest of this section and the "Step-by-Step Guide" on page **10.** This will enable you to set the unit up quickly with your hi-fi system.

What's in the Box?

The box should contain the following:

- ***dCS Verdi Encore***
- User Manual
- Control Summary
- Power Cable
- Spare Fuses (2)
- Remote Control unit
- Remote Control guide
- 3 x AAA batteries
- 1 pt Pozidriv screwdriver (for fitting the Remote Control unit batteries)
- IEEE 1394 cable assembly
- BNC cable
- 2.5mm hex key (for removing the transit screws)
- Top glass plate
- 4 x bolts and plastic washers (for fitting the top glass plate)
- 4mm hex key (for fitting the top glass plate)

IMPORTANT! *To reduce the risk of transit damage, the mechanism is clamped with 4 transit screws before shipping. These MUST be removed before use. See page **43** or the "**Read This Before Using Your dCS Verdi!**" sheet for details. Also, the top glass plate should be fitted before use. (Your dealer may have done this for you.)*

IMPORTANT! *For safety reasons, the Remote Control is shipped with the batteries packed separately. For fitting details, see page **45**.*

Check the contents of the inner carton very carefully against the list above. Notify your dealer as soon as possible if anything is missing or damaged. ***dCS*** suggest that all of the original packaging is retained for use when transporting any units. Replacement packaging can be ordered from ***dCS*** or our distributors.

Safety Notice

Verdi Encore contains no user serviceable parts. Do not attempt to open the case as there are potentially dangerous voltages present inside. In the event of the unit developing a fault, please consult your dealer.

IMPORTANT! *This equipment MUST be connected to a safety earth (or ground) via the power cable.*

Mains Voltage Setting

Before connecting the power cable to your ***Verdi Encore*** for the first time, please check that it has been set to the correct operating voltage for your local mains supply. 50Hz or 60Hz operation is not important – the unit can use either. The unit's present voltage setting is shown on the label beneath the mains inlet on the rear panel. If this does not match your local supply voltage, DO NOT attempt to use the unit. Contact your dealer to arrange to have the unit reset. Using the ***Verdi Encore*** with the wrong mains setting for your local supply may result in serious damage to the unit and will invalidate the warranty. DO NOT attempt to reset the unit yourself.

IMPORTANT!

Please use a sensible power cable, such as the one supplied with the unit. Some audiophile power cables presently available are excessively heavy, their weight can damage the power inlet connector. Such damage is not covered by the warranty.

Positioning the Unit

Place ***Verdi Encore*** on a firm, vibration free base so as to allow convenient connection to the other parts of your other system. We suggest that you avoid siting ***Verdi Encore*** either directly above or below preamplifiers or tuners, if either of these will be used in your system at the same time as ***Verdi Encore***.

OPTIONS

The following options may be fitted to new units or retrofitted at a later date.

Option code	Option
V5	Mains voltage set to 230/240V
V4	Mains voltage set to 215/220V
V3	Mains voltage set to 200V
V2	Mains voltage set to 115/120V
V1	Mains voltage set to 100V

Table 8 – Options available

Mains Supply Voltage

Any unit may be set for operation from 230/240V, 215/220V, 200V, 115/120V or 100V A.C. Units are shipped set for the mains supply voltage according to the destination. The voltage setting can be updated later by your dealer, if necessary. Specify the new country of use or the new voltage setting.

Having Your Options Changed

dCS support modifications, updates and option changes to supplied units. Major changes are normally carried out at ***dCS,*** as we have extensive test facilities and can verify the changes. Please contact your dealer for details.

IMPORTANT! *Please do not attempt the changes yourself. The unit's performance or reliability may be impaired and the warranty will be invalidated.*

MAINTENANCE AND SUPPORT

Service & Maintenance

dCS audio products are designed not to need regular maintenance, and contain no user serviceable parts apart from the mains fuse.

Obtaining Service

If you experience problems with your ***Verdi Encore***, you should check the "Troubleshooting" section on page **50**. You may be able to resolve the situation yourself (for example, by changing a menu setting).

If this does not resolve the problem, contact your authorised ***dCS*** dealer for advice, quoting the model, the full serial number (see Serial on page **18**), the software version number (see Issue on page **17**) and giving a detailed description of the fault. If further action is necessary, your dealer will advise you fully.

Mains Fuse

There is a mains fuse below the power inlet, accessible from the outside of the unit. If the fuse blows, it may be changed by the user. The current consumption of the unit is very low, so it only blows if power surges occur, or there is a fault in the unit. Usually, power surges cause no other damage, but if the fuse blows repeatedly on replacement, some other damage will have been done and the unit must be returned to ***dCS*** for repair.

Fuse Type: 20 x 5mm 0.5 amp T HRC fuse

IMPORTANT! *If the fuse should fail, it is essential that it be replaced with one of the same type and rating. Failure to do so could result in damage to the unit, risk of fire or electric shock and will invalidate the guarantee.*

Replacing a Blown Fuse

Referring to **Figure 6**, remove the power cable, use a small flat bladed screwdriver to pry up the tab on the fuse carrier (A) and pull it out. Push the blown fuse out of the clip in the carrier (B) and dispose of it. Fit a new fuse in the clip (C) and push the carrier back into the unit so that it clicks home. Spare fuses are provided with the unit.

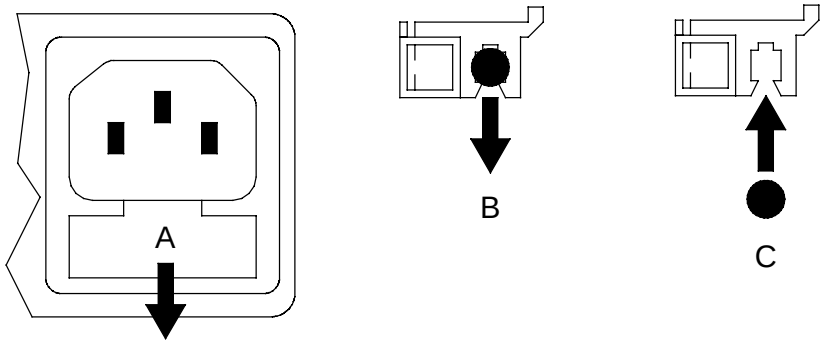


Figure 6 – Changing the Mains Fuse

IMPORTANT! *Disconnect the power cable before changing the fuse.*

Removing the Transit Screws

The transit screws clamp the mechanism to reduce the risk of shipping damage. They must be removed before the unit is used.

do this: Lift the unit out of the packaging and place it on a table top. Remove the rubber mat from the top of the unit. Identify the four transit screws from the drawing below.

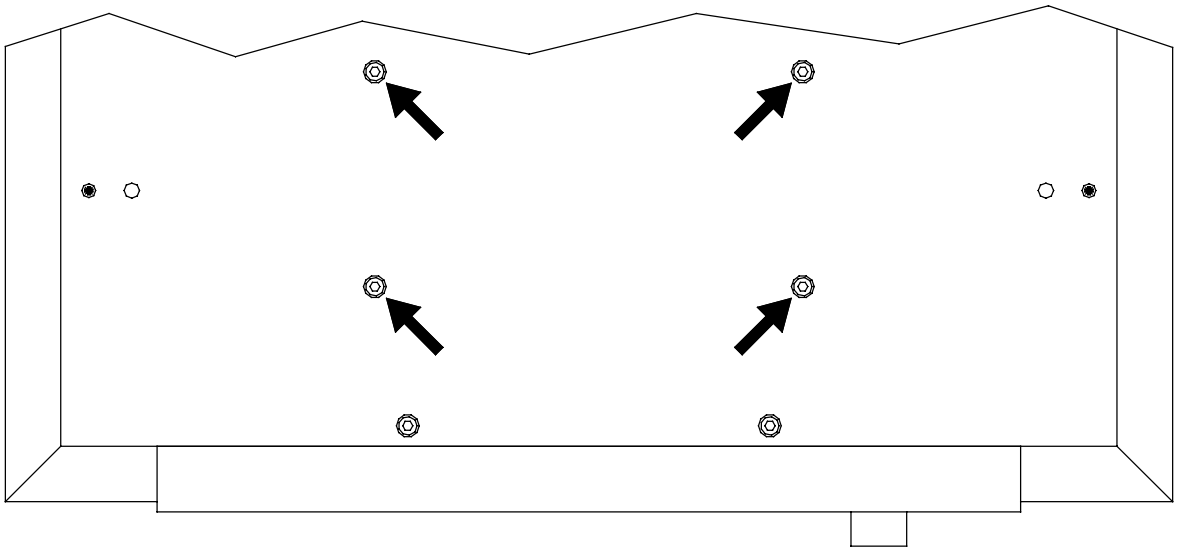


Figure 7 – View of the top of the unit showing the transit screws

do this: Using the 3mm hex key, unscrew the transit screws and put them in a safe place.

IMPORTANT! *If you intend to transport the unit outside the room, replace the transit screws – they need to be secure **BUT NOT OVER-TIGHT**.*

Fitting the Top Glass Plate

do this: Lay the black rubber mat flat in the top of the unit so that the 4 screw holes are visible through the holes in the mat.

do this: Remove the glass plate from its plastic bag.

do this: Find the ***dCS*** logo on the top face of the glass. Fit the glass with the logo in the front left corner of the unit as shown in **Figure 8**.

do this: Carefully locate the right hand edge of the glass in the well in the top of the unit (step 1 in **Figure 8**).

do this: Lower the glass down on the left hand side until it can be safely dropped into place (step 2 in **Figure 8**). Centralise the glass plate.

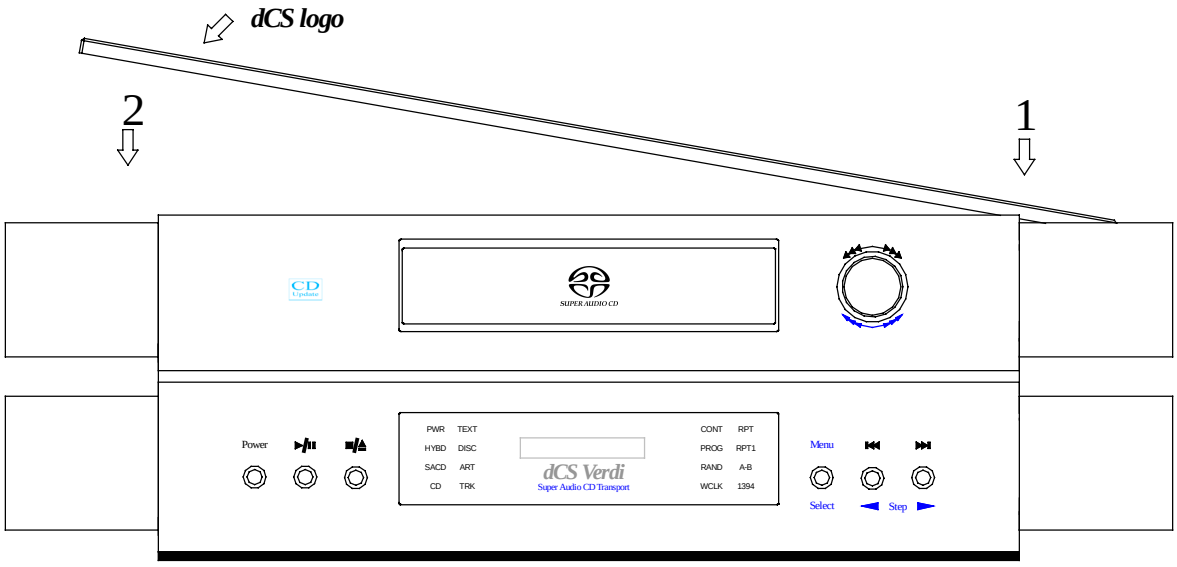


Figure 8 – Locating the Top Glass Plate

do this: Fit a black top-hat washer onto each screw, fit the 4 screws through the holes in the glass (step 3 in **Figure 9**).

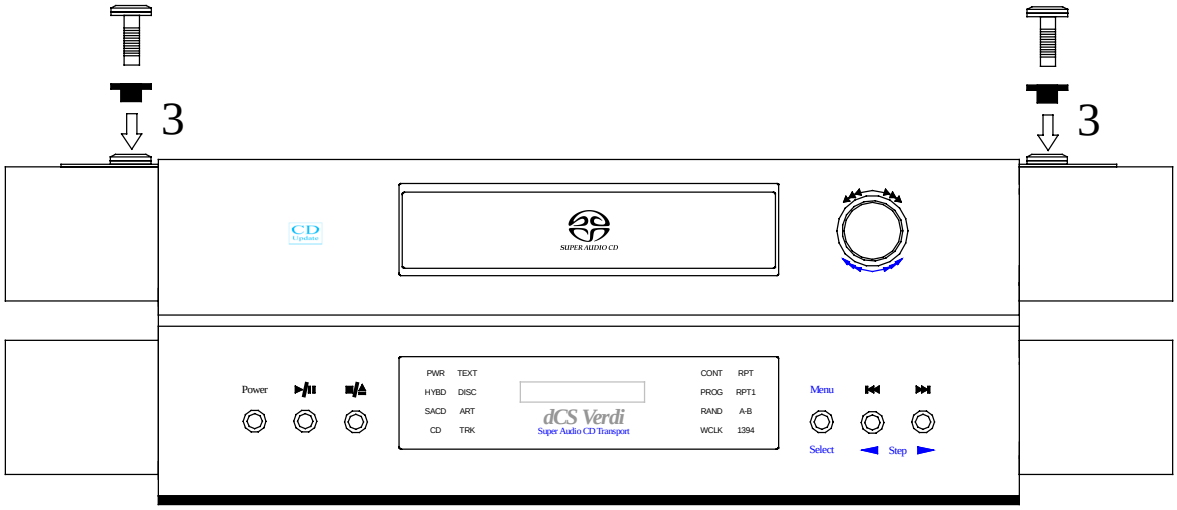


Figure 9 – Securing the Top Glass Plate

do this: Locate the top-hat washers into the holes and at first tighten up the screws FINGER TIGHT ONLY. Use the 4mm hex key provided to tighten up the screws at most ONE QUARTER OF A TURN ONLY.

IMPORTANT! *DO NOT OVER-TIGHTEN THE SCREWS – this can compress the rubber mat and spoil its' sound dampening performance.*

Fitting or Replacing the Batteries in the Remote Control

For safety reasons, the Remote Control is supplied with the 3 batteries packed separately. Any replacement batteries must be type AAA, MN2400 or equivalent alkaline leak-proof batteries.

Opening the battery compartment and removing batteries

do this: Turn the Remote Control unit over and remove the 2 screws shown in **Figure 10** using the 1-point Pozidriv screwdriver supplied. Please do not use a Philips head screwdriver as this will damage the screw heads. Lift off the battery cover.

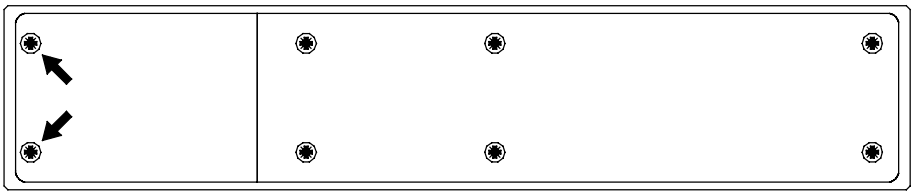


Figure 10 – Removing the Remote Control battery cover

do this: To remove discharged batteries, press the + end back against the spring and pull that end out of the unit. A small key or screwdriver may be used if the battery is a tight fit. Dispose of the discharged batteries safely.

Fitting new batteries and closing the case

do this: To fit a new battery, press the - end (the flat end) against one of the spring contacts in the battery holder then press the battery into its slot. Battery polarity is indicated on the battery holder and on the diagram below. Always fit a complete set of 3 new batteries.

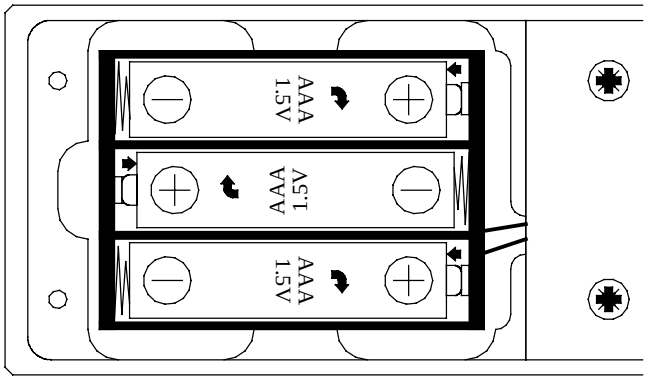


Figure 11 – Changing the Remote Control unit batteries

IMPORTANT! *Please ensure the batteries are fitted the right way around – failure to do so may damage the Remote Control and invalidate the warranty. Damage caused by leaking batteries is not covered by the warranty.*

do this: To re-assemble the case, fit the battery cover, ensuring the side with the recessed holes is outward. Replace the 2 screws, taking care not to over-tighten them. The Remote Control is ready for use.

dCS Limited Warranty

What This Warranty Covers

Provided the sale of this dCS product is registered with dCS within 30 days of the original purchase, this warranty covers parts and labour to correct any defects in materials or workmanship for a period of 1 year from the date of purchase. A copy of the original bill of sale may be required to verify the date of purchase.

IMPORTANT!

Registration is generally completed on your behalf by the authorised dCS reseller However it is your responsibility to ensure that the product is registered. If you do not receive a warranty certificate in the mail from dCS within 30 days of your purchase, contact dCS.

Registration also ensures you will receive information on important hardware and software upgrades as they become available.

For products not registered with dCS, the 1 year warranty period commences on the date the product was originally shipped from the ***dCS*** factory.

If you sell this product within the warranty period, the balance of the warranty will remain in effect for subsequent owners.

What This Warranty Does Not Cover

This warranty does not cover products with missing or altered serial number, products originally purchased from other than an authorised ***dCS*** reseller, or problems that result from:

- External causes such as accident, abuse, misuse, or problems with electrical power.
- Unauthorised modifications.
- Use not in accordance with the operating conditions and instructions stated in the user manual.
- Service or repair by anyone other than an authorised ***dCS*** Distributor.
- Product operation on voltage outside a range of the voltage specified on the back panel, plus or minus 10%, or without a proper ground connection.
- Transport in inadequate packing.
- Problems caused by using accessories, parts, or components not supplied by ***dCS***.
- Master Clock accuracy is not guaranteed 12 months after shipping from ***dCS***.

This warranty does not cover carriage costs.

How To Obtain Service

Should you encounter a problem, please check the “Troubleshooting” section on page **50**. You may be able to resolve the situation yourself (for example, by changing a menu setting). If this does not resolve the problem, contact your authorised ***dCS*** reseller for advice, quoting the model, the full serial number, the software version and giving a detailed description of the fault. If you are unable to contact the reseller, you may contact ***dCS*** directly at:

dCS Ltd, Mull House, Great Chesterford Court
Great Chesterford, Saffron Walden, CB10 1PF UK

Phone: +44 (0)1799 531999 Fax: +44 (0)1799 531681
email: support@dcsltd.co.uk

Updating your *Verdi Encore*

dCS products make extensive use of software configurable chips – FPGAs and DSPs. This gives us the ability to update our products to add extra features, update digital interface standards or make performance improvements by loading new software. Occasionally, a hardware update may be necessary also to increase the "capacity" of the electronics, add extra connectors or extra front panel controls.

Software Updates

Please note that not all software updates make an earth-shattering change. You should have a clear idea of what you expect to gain before updating to the latest issue.

If the software loaded in your unit is (for example) version 3.45:

- A change to version 3.46 indicates a minor update for internal ***dCS*** use – to make testing easier, or more thorough, or to cater for some minor hardware change. Do not update your unit.
- A change to version 3.50 is a more serious update, offering extra functionality. If you want to use the extra features, update your unit. The manual will be updated for this (check the web-site).
- A change to version 4.00 is a major update. It will require updated hardware and the manual will be updated

If you have older hardware, some of the features added by new software may not be available due to (for example) a missing connector. For **recent** hardware, this is mentioned in the "Upgrader's notes" in this manual. If you need the missing feature, contact your dealer or ***dCS*** to arrange a hardware update.

- If the software currently loaded includes a CD Update page, you can update the software yourself. Contact ***dCS*** for a CD and follow the instructions in the CD Update section on page **18**, or the instructions supplied with the CD. The update program will check your hardware configuration and install the latest software compatible with it.
- If you do not have the CD Update feature loaded or have difficulty with it, a ***dCS*** distributor can download files from a PC into any unit fitted with a **SUC** connector. Contact your dealer for details.
- For older units without a **SUC** connector, your distributor can install new firmware in your unit. Firmware updates are low-cost from ***dCS*.** Contact your dealer for details.

Hardware Updates

You may wish to have your hardware updated from time to time to take advantage of new features in the latest software. ***dCS*** offer this service - we will retest, reset any adjustable items to current shipping standards, and install any modifications or updates that have occurred since your unit was first shipped.

The price will depend on the hardware changes necessary – please contact your dealer or ***dCS*** for details and pricing. In order to ensure speedy turn around, please contact us prior to returning the unit to get a **Service Return** number.

Safety and Electrical Safety

There are no user serviceable parts inside ***Verdi Encore*** and so there is no need to remove the covers. If for some reason you do:

IMPORTANT! *Disconnect the power cable before removing any covers or changing the fuse.*

There are no substances hazardous to health inside ***Verdi Encore***.

Cleaning the Case

Do not apply any of the following cleaning products to the case as they will damage or alter the finish:

- Corrosive or abrasive agents
- Spirit or alcohol based cleaners
- Wax polish

do this: To remove dust, wipe with a moist, soft cloth.

do this: To remove deposits from the case, first disconnect the power cable then spray very lightly with a proprietary glass cleaner containing ammonia and wipe off gently with a soft cloth, taking care to avoid scratches. Do not spray the cleaner onto the connectors or the rear panel.

TROUBLESHOOTING

Troubleshooting Guide

If you experience difficulties when using your ***Verdi Encore***, the following suggestions may help resolve the problem.

The unit fails to power up

- Ensure there is power available on the mains cable. Connect the power cable, ensure it is pushed all the way in and press the **Power** button. If there is a Power switch on the back panel, ensure this is set to the On (I) position.
- Check the rated supply voltage shown on the rear of the unit matches the local supply voltage.
- Check that the fuse has not blown - if so, correct any obvious cause then replace the fuse as described on page **42**.

The DAC/DDC suddenly mutes, *Verdi Encore* repeats its' power-up sequence

- This may be caused by short drop-outs or brown-outs on the AC supply. When the disturbance has passed, normal operation should be restored.
- Check for loose mains wiring.

The DAC/DDC fails to lock to *Verdi Encore* or displays "No Input"

- Ensure the correct DAC/DDC input is selected.
- Check that the digital audio cable is of the correct type, correctly connected and not damaged. Damaged cables are a VERY common cause of malfunctions!
- Check that ***Verdi Encore*** is switched on.
- If you are using a Master Clock, check it is set to 44.1kHz and try disconnecting the Word Clock cable. If the DAC/DDC locks, check the Word Clock connections.
- When using the **1394** interface, you must also connect a 44.1kHz Word Clock feed to the DAC (or from the DAC if the DAC is in Master mode).
- If using the **SDIF-2** interface, ensure all 3 cables are connected correctly.
- If using a BNC SPDIF interface, ensure it is connected to the **BNC** output, not the **SDIF** interface.

The DAC/DDC locks but no signal is received

- ***Verdi*** only: When playing an ordinary CD or the CD layer of a hybrid disc, ***Verdi*** generates digital silence from the **1394** interface and signal on all other interfaces.

A disc is trapped in the unit

- If the unit has problems reading the disc and the tray does not open after 2 minutes, power down the unit (completely off, not just standby), hold down the **Stop / Eject** button then switch on. If the front panel is frozen, pull out the power cord for 10 seconds, hold down the **Stop / Eject** button, then replace the cable. When the unit has booted up, the tray should open and you can release the button.
- In normal use, wait for the transport to finish displaying **Reading** before trying to eject the disc.

The Remote Control fails to control the unit

- The Remote Control is normally shipped with the batteries packed separately for safety reasons. If you are using the Remote Control for the first time, you must fit the batteries first - see page **45**.
- If the Remote Control has not been used for a long time or has gradually lost range, the batteries should be replaced - see page **45**.
- If you have just replaced the batteries but the unit still does not work, check that the batteries are fitted the right way around - see page **45**. If two or more batteries were fitted the wrong way around, the Remote Control may be permanently damaged. If this occurs, contact your dealer for advice.
- For correct operation, there must be a clear line of sight between the infrared transmitter at the end of the Remote Control and the remote control sensor in the main unit, located on the left hand side of the display. If the line of sight is blocked (for example by a coffee table) the Remote Control may operate erratically or not at all.

The Display turns on briefly when a control is operated, then turns off

- This happens when the display brightness is set to Brightness: 0. Open the Menu and change Brightness to a different setting.

CD-R does not play correctly

- ***Verdi Encore*** is CD-R compatible but some brands of disks are more reliable than others due to differences in design. ***dCS*** recommend Traxdata TXS-1680 disks – we have used these without difficulty for some years.
- The CD-R must be formatted as a music CD, rather than a data CD.
- You can burn and update an incomplete music CD on a CD Re-Writer, but the disk must be finalised before it can be played on an audio CD transport. Finalising creates a Table Of Contents (TOC) at the start of the disk. If the TOC is missing, the transport will keep trying to find it for about 2 minutes, displaying **Reading**. During this time, you will not be able to stop or eject the disk. Wait until the unit displays **TOC Error**, then open the tray and remove the disk.

Troubleshooting the IEEE 1394 Interface

This section covers difficulties that may be encountered using a ***dCS Verdi*** SACD Transport (v1.20 or later), a ***dCS Verdi La Scala*** Upsampling SACD Transport or a ***dCS Purcell*** Upsampler to drive a ***dCS Elgar Plus*** DAC (v4.20 or later) or ***Delius*** DAC (v2.20 or later) with DSD data over an IEEE 1394 interface.

Upsampler or Transport displays "Inactive"

- This can happen momentarily during locking. If it does not change to **Active**, open the Transport or Upsampler's menu and ensure the Transmit page (if there is one) is set to Active.

The Unit keeps displaying "No Comms"

- This will appear briefly while the 1394 system is checking for connections.
- If the **No Comms** message does not clear, ensure that all units in the 1394 chain are switched on and securely connected by 1394 cables.
- Check that all the units in your system are loaded with the same 1394 code issue. If not, contact ***dCS*** for an update CD.

The Unit keeps displaying "Search.."

- This will appear briefly after the 1394 system has established communications.
- If the **Search** message does not clear, ensure that you have not connected both 1394 connectors from one unit to both 1394 connectors on another unit or set up a loop. This prevents the 1394 bus settling.
- Check that the 1394 cables are correctly fitted.
- Check that all the units in your system are loaded with the same 1394 code issue. If not, contact ***dCS*** for an update CD.

The DAC displays "Verdi Word Clock Missing"

- With the DAC in slave mode, check there is an undamaged BNC cable connecting ***Verdi***'s **WClk Out** to the DAC's **WClk In**.
- Ensure the cable is D.C. coupled. A.C. coupled cables are not suitable for use with Word Clock or SDIF.

The DAC displays "Missing Word Clock between Clk Out & Verdi Clk In"

- With the DAC in master mode, check there is an undamaged BNC cable connecting the DAC's **WClk Out** to ***Verdi***'s **WClk In**.
- Ensure the cable is D.C. coupled. A.C. coupled cables are not suitable for use with Word Clock or SDIF.

The DAC displays "Please check source slaved to DAC Word Clock Out"

- With the DAC in master mode, check there is an undamaged BNC cable connecting the DAC's **WClk Out** to the source's **WClk In**.
- Ensure the cable is D.C. coupled. A.C. coupled cables are not suitable for use with Word Clock or SDIF.

The DAC displays "Wrong Word Clock @ Verdi Clk In"

- ***Verdi*** has detected a clock frequency other than 44.1kHz on it's **WClk In** connector. Ensure the clock source is set to 44.1kHz.
- With the DAC in master mode, check there is an undamaged BNC cable connecting ***Verdi***'s **WClk Out** to the DAC's **WClk In**.
- Ensure the cable is D.C. coupled. A.C. coupled cables are not suitable for use with Word Clock or SDIF.

The DAC remains muted

- If the DAC is displaying the **Volume** setting, change the Disp menu page setting to Disp:Fs and check for error messages.
- Check that all the units in your system are loaded with the same 1394 code issue. If not, contact dCS for an update CD.
- If all else is in order, switch off the Transport, the Upsampler and the DAC then switch them on again. If this situation keeps recurring, please consult your dealer.

The DAC takes a long time to unmute

- The **1394** interface can take around 30 seconds to settle and unmute.
- Try setting the DAC to **1394** mode before setting the Upsampler to DSD mode.
- If your system is in standby mode or switched off, try turning the DAC on before the Upsampler or Transport.

If this information does not resolve the problem, please contact your dealer for advice.

IF YOU NEED MORE HELP

In the first instance, you should contact your dealer. If they cannot resolve the issue, contact ***dCS***. Our office hours are 8:30 a.m. to 5:00 p.m. Monday to Friday, UK time (GMT in Winter or GMT + 1hr in Summer). Contact us by phone or fax on:

	Inside the UK	Outside the UK
Telephone	01799 531 999	+44 1799 531 999
Fax	01799 531 681	+44 1799 531 681

Table 9 – ***dCS*** Contact Information

You can write to us at:

dCS Ltd
Mull House
Great Chesterford Court
Great Chesterford
Saffron Walden CB10 1PF
UK

Our email address: support@dcsltd.co.uk

Our web-site is: www.dcsltd.co.uk

The web-site is regularly updated. You will find full details of all ***dCS*** products here, plus the latest ***dCS*** news.

Other Information

dCS produce technical notes from time to time, on issues related to ADCs, DACs and DDCs. If you are interested in these, please check our web-site.

INDEXES AND SOFTWARE VERSION NUMBERS

Software History

This manual is for ***Verdi Encore*** software version 1.0x.

Definitions and Abbreviations

ADC	Analogue to Digital Converter, sometimes referred to as an A/D Converter.
AES3	A standard professional stereo digital audio format consisting of one serial PCM data line. It uses a balanced cable to extend transmission distance and includes a comprehensive messaging system.
DAC	Digital to Analogue Converter, sometimes referred to as a D/A Converter.
dB	A relative signal level or ratio in decibels. The context may indicate the reference level.
dB0	Level in decibels, referred to a full scale sine wave in a sampled system. So, 0dB0 is full scale.
dBu	A signal level relative to 0.775V rms, making no allowance for external loading.
DDC	Digital to Digital Converter, sometimes referred to as a D/D Converter.
DSD	Direct Stream Digital - a single bit digital audio format, sampled at 2.822MS/s.
kS/s	Sample rate in kilo-samples per second. This replaces kHz, which is technically incorrect when referring to sample rates.
SDIF-2	Sony Digital InterFace – a stereo digital audio format consisting of 2 serial PCM or DSD data lines. Usually used with a Word Clock.
SPDIF	Sony / Philips Digital InterFace – a stereo digital audio format for consumer equipment, consisting of one serial PCM data line. Similar to AES3, but unbalanced and with different messaging.
Word Clock	A synchronisation signal consisting of a square-wave, the frequency of which is the sample rate. Usually transmitted through co-axial cable and BNC connectors.

Key to Cable Identification

If you are reading a colour print or a soft copy of this manual, cable types shown in figures can be identified from **Table 10**.

Cable Type	Colour / Style
XLR Analogue	Brown, solid
RCA Phono Analogue	Brown, long dash
XLR Digital (AES3)	Blue, solid
BNC Digital	Pale blue, solid
RCA Phono Digital (SPDIF)	Pale blue, short dash
Optical (SPDIF)	Dark magenta, solid
IEEE 1394	Red, solid
Sync Link	Green, solid
Word Clock	Dark green, solid
AES Reference	Dark green, long dash
GPS Reference	Dark green, short dash
RS-232	Purple, solid

Table 10 – Cable colours and styles

Where more than one cable of any type is used in a drawing, they can be identified by a coloured sleeve at the source and a coloured arrow head at the destination.

List of Tables

Table 1 – IEEE 1394 Interface Electrical Characteristics 28
Table 2 – AES/EBU Interface Electrical Characteristics 28
Table 3 – SPDIF Interface Electrical Characteristics 28
Table 4 – Optical Interfaces Electrical Characteristics 28
Table 5 – SDIF / Word Clock Interface Electrical Characteristics 29
Table 6 – Power consumption for consumer products 29
Table 7 – Size and weight for consumer products 30
Table 8 – Options available 40
Table 9 – *dCS* Contact Information 54
Table 10 – Cable colours and styles 56

List of Figures

Figure 1 – Connecting *Verdi Encore* to *Elgar Plus* 11
Figure 2 – Using a DAC in Master mode 14
Figure 3 – Menu flow chart 16
Figure 4 – *dCS Encore* Front Panel 20
Figure 5 – *dCS Verdi Encore* Rear Panel 23
Figure 6 – Changing the Mains Fuse 42
Figure 7 – View of the top of the unit showing the transit screws 43
Figure 8 – Locating the Top Glass Plate 44
Figure 9 – Securing the Top Glass Plate 44
Figure 10 – Removing the Remote Control battery cover 45
Figure 11 – Changing the Remote Control unit batteries 45

Keywords and Phrases

0

0-9 buttons, remote 27

1

1394 indicator 22, 25
1394 interface 24, 32
1394 interface, synchronising 32
1394 interface, troubleshooting 52
1394 Issue menu 17
1394 output, connecting 11
1394, cannot lock to 50

A

A-B indicator 21
Active message 52
ADC 55
AES input 23
AES output 23
AES output, connecting 12
AES3 55
applications 14
automatic input selection 32

B

basic operation 12
batteries for remote control 45
batteries, polarity 45
biography, Giuseppe Verdi 4
blank display 17, 51
BNC output 24
BNC, cannot lock to 50
Brightness menu 17
button, Display, remote 27
button, Fast Forward 22
button, Fast Reverse 22
button, Menu 16, 22
button, Menu remote 27
button, Menu Select 16, 22
button, Menu Step 16, 22
button, Menu Step Back 16, 22
button, Mute, remote 27
button, Next Track 22
button, Next Track, remote 27
button, Play / Pause 21
button, Play/Pause, remote 27
button, Power 20
button, Previous Track 22
button, Previous Track, remote 27
button, SACD/CD, remote 26
button, Standby, remote 26
button, Stop / Eject 21
button, Stop/Eject, remote 27
button, Vol/Bal, remote 27
buttons, 0-9, remote 27
buttons, Up/Down, remote 27

C

cable identification 56
cables 10, 23, 24, 25, 50
cannot lock to 1394 50
cannot lock to BNC 50
cannot lock to SDIF-2 50
cannot record from SPDIF output 24
CD indicator 21
CD tray 22
CD Update menu 18
CD, upsampling 3
CD-R not finalised 51
CD-R problems 51
changing options 40
cleaning the case 48
clock accuracy 29
clock cleaning 29
clocking 29
closing the Menu 16
connecting the outputs 11
connector, Power Link 25
CONT indicator 21
contact information 18, 54
Contact menu 18
contents of box 38
crystal oscillator 29

D

DAC 55
DAC mutes 50
DAC remains muted, 1394 input 53
DAC takes time to unmute, 1394 input 53
dB 55
dBu 55
DDC 55
definitions 55
digital inputs 23
digital interface specifications 28
digital outputs 23
display blanking 17
display brightness 17
Display button, remote 27
display, main 21
do not swap SDIF-2 cables 24
down-sampling 23, 24, 29
DSD 24, 29, 32, 55
DSD output, connecting 11

E

earthing 38

F

fast forward 27

Fast Forward button 22
fast reverse 27
Fast Reverse button 22
first-time use 38
fitting the glass plate 43
front panel 20
full scale 55
fuse, mains 42
fuse, replacing 42
fuse, spare 38

G

Giuseppe Verdi, biography 4
glass plate, fitting 43
grounding 38
guide to basic setup 10

H

hardware updates 47

I

IEEE 1394 interface 24, 32
Inactive message 52
indicator, 1394 ..... 22, 25
indicator, A-B 21
indicator, CD 21
indicator, CONT 21
indicator, PROG 21
indicator, PWR 21
indicator, RAND 21
indicator, REPT 21
indicator, RPT1 21
indicator, SACD 21
indicator, status 21
indicator, WCLK 21, 24
input selection, automatic 32
input, AES 23
input, RCA 23
input, Wordclock 24
Issue menu 17
issue, software 17

J

jitter 24
jitter, low frequency 29

L

learning remotes 34
lock-in time 29
locking problems 50

M

main display 17, 21
maintenance 42
master clock 24
master clock, locking problems 50
master mode, DAC, using 14
Menu 16
Menu button 16, 22
Menu button, remote 27
menu scrolling, remote 27
Menu Select button 16
Menu Step Back button 16, 22
Menu Step button 16, 22
menu time out 16
menu, CD Update 18
Menu, closing 16
Menu, opening 16
Menu, using 16
message, Active 52
message, Inactive 52
message, Missing Wordclock between Clk Out … 52
message, No Comms 52
message, Please check source slaved to DAC Wordclock Out 52
message, Search 52
message, TOC Error 51
message, Verdi Wordclock Missing 52
message, Wrong Wordclock @ Verdi Clk In 53
Missing Wordclock between Clk Out … message from DAC 52
mode, standby 20
music by Verdi 5
Mute button, remote 27

N

Next Track button 22
Next Track button, remote 27
No Comms message 52
no output 50

O

opening the Menu 16
operating conditions 30
optical output 24
option, mains supply voltage 40
options 40
options, changing 40
output, AES 23
output, BNC 24
output, optical 24
output, RCA 24
output, SDIF-2 24
output, Toslink optical 24
output, Wordclock 24
outputs, connecting to 11
outputs, SPDIF 24

P

packaging 42
packaging, replacement 38
phase locked loop 29
Play / Pause button 21
Play/Pause button, remote 27
playing a disc 12
Please check source slaved to DAC Wordclock Out message from DAC 52

positioning the unit....39
Power button....20
power inlet....25
Power Link connector....25
power off....20
power on....20
power requirements....29
power switch....25
power up failure....50
PowerDn message....20
powering up....10
Previous Track button....22
Previous Track button, remote....27
problems playing a CD-R....51
PROG indicator....21
PROG mode....13
programming a track sequence....13
pull-in range....29
PWR indicator....21

R

RAND indicator....21
RC5 codes....34
RCA input....23
RCA output....24
rear panel....23
recommended recordings by Verdi....5
remote control....26, 45, 51
remote control codes....34
remote control sensor....21, 51
remote control, batteries....51
remote control, replacing batteries....45
removing the transit screws....43
REPT indicator....21
rotary control....22
RPT1 indicator....21

S

SACD....3
SACD indicator....21
SACD/CD button, remote....26
safety....38
safety, electrical....48
sample clock....29
sample rate....9, 24, 29, 55
sample rate, output....23
SDIF-2....55
SDIF-2 cables, do not swap....24
SDIF-2 output....24
SDIF-2 output, connecting....12
SDIF-2, cannot lock to....50
Search message....52
Select button....16, 22
Serial menu....18
serial number, full....18
serial number, short....25
service....42, 46
setting, supply voltage....39
size....30
software issue....17
software updates....47
software upgrade connector....25
software version....55
SPDIF....55
SPDIF output....24
SPDIF output, cannot record from....24
SPDIF output, connecting....12
specification....28
specification, AES3 output....28
specification, IEEE 1394 interface....28
specification, mechanism....28
specification, optical output....28
specification, SDIF-2 output....29
specification, SPDIF outputs....28
specification, Wordclock I/O....29
Standby button, remote....26
standby mode....20
status indicator....21
Step button....16
step-by-step guide....10
Stop / Eject button....21
Stop/Eject button, remote....27
SUC connector....25
supply voltage option....40
supply voltage setting....25, 39
switch, power....25
synchronising 1394 interface....32

T

technical notes....54
temperature, operating....30
TOC Error message....51
Toslink optical output....24
track sequence, programming....13
transit screws, removing....43
troubleshooting....50
troubleshooting 1394 interface....52

U

unfinalised CD-R....51
Up/Down buttons, remote....27
updates....25, 47
updates, hardware....47
updates, software....47
updating your Verdi Encore....47
upsampling....29
using DAC master mode....14
using for the first time....38

V

VCXO....29
Verdi Wordclock Missing message from DAC....52
Verdi, biography....4
Verdi, music by....5
Vol/Bal button, remote....27

W

warranty 46
warranty, exclusions 46
WCLK indicator 21, 24
weight 30
Word Clock 55
Wordclock input 24
Wordclock output 24
wordclock, synchronising to 29
Wrong Wordclock @ Verdi Clk In message from DAC 53

dCS Verdi Encore Release Notes for v1.10

The software in your ***Verdi Encore*** has been updated from v1.02 to v1.10, which adds 2 new features.

1. Easy Play

Easy Play is a signalling system that allows the ***Verdi Encore*** to work out how the ***dCS*** units in the system are connected. When you load a disc, the ***Encore*** sets your DAC to the correct input , ready to play. Previous versions of ***Encore*** had this feature also, but we have added a menu page to control it.

The Easy Play menu page has 3 options:

- Normal – Sets the DAC to the **1394** input, **Encore** channel, when a disc is loaded.
- Verdi - Sets the DAC to the **1394** input / **Encore** channel, when an SACD or hybrid disc is loaded. If a CD is loaded, sets the DAC either to the **1394** input / **Purcell** channel or the PCM input connected to the ***Encore***. This was the system used in the ***Verdi***.
- Off – No automatic switching.

2. Digital Inputs

A source menu page has been added to give access to the **AES** and **RCA** digital inputs. These will accept data up to 24 bits at 32, 44.1 or 48kS/s, convert it to DSD and output the data on the **1394** interface. The Source page has 3 options:

- Disc – operates as a transport.
- AES – operates as an upsampler, taking data from the **AES** input. The CD mechanism is disabled in this mode.
- RCA – operates as an upsampler, taking data from the **RCA** input. The CD mechanism is disabled in this mode.

Note that the ***Encore*** takes several seconds to change mode.

Please keep in contact with your ***dCS*** retailer for news, or check our web-site at www.dcsltd.co.uk.

dCS Verdi Encore Release Notes for v1.10

The software in your ***Verdi Encore*** has been updated from v1.02 to v1.10, which adds 2 new features.

1. Easy Play

Easy Play is a signalling system that allows the ***Verdi Encore*** to work out how the ***dCS*** units in the system are connected. When you load a disc, the ***Encore*** sets your DAC to the correct input , ready to play. Previous versions of ***Encore*** had this feature also, but we have added a menu page to control it.

The Easy Play menu page has 3 options:

- Normal – Sets the DAC to the **1394** input, **Encore** channel, when a disc is loaded.
- Verdi - Sets the DAC to the **1394** input / **Encore** channel, when an SACD or hybrid disc is loaded. If a CD is loaded, sets the DAC either to the **1394** input / **Purcell** channel or the PCM input connected to the ***Encore***. This was the system used in the ***Verdi***.
- Off – No automatic switching.

2. Digital Inputs

A source menu page has been added to give access to the **AES** and **RCA** digital inputs. These will accept data up to 24 bits at 32, 44.1 or 48kS/s, convert it to DSD and output the data on the **1394** interface. The Source page has 3 options:

- Disc – operates as a transport.
- AES – operates as an upsampler, taking data from the **AES** input. The CD mechanism is disabled in this mode.
- RCA – operates as an upsampler, taking data from the **RCA** input. The CD mechanism is disabled in this mode.

Note that the ***Encore*** takes several seconds to change mode.

Please keep in contact with your ***dCS*** retailer for news, or check our web-site at www.dcsltd.co.uk.